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ABSTRACT

Despite the proven record of cooperative education (CE) in high school vocational programs and professional college-level programs, several barriers must be overcome before CE can be spread in its current form or used as a model for enlarged school-to-work transition efforts. Among the barriers identified are the following: the diminished status of high school CE because of its links to vocational education, which is perceived as a dumping ground for low-achieving students; the high cost of CE because of the large amounts of time teacher/coordinators must spend marketing cooperative programs and screening, placing, and monitoring students; the gradual disappearance of preservice courses to train CE teacher/coordinators; and difficulties in gaining employer support for either CE or apprenticeship programs. Cooperative education has been demonstrated to produce measurable benefits in the following areas: social development, school persistence, and economic outcomes. The insights of several studies suggest features of successful CE programs: high quality placements, teacher/coordinators with appropriate occupational experience, close supervision at the worksite, strong links between job training and related instruction, frequent and specific informal and formal evaluations of students' progress, parent/guardian involvement, and strong administrative support. (Contains 23 references.) (MN)

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COOPERATIVE EDUCATION AS A STRATEGY FOR SCHOOL-TO-WORK TRANSITION

As the nation struggles with developing policies for a system for school-to-work transition, it may be helpful to draw on lessons from education and training strategies already in place. Cooperative education ("coop") is the oldest of these programs. As the report of the William T. Grant Foundation, *The Forgotten Half*, concludes, cooperative education "has a solid achievement record and merits far more attention than it has received" (1988, p. 96). Yet the coop experience also suggests that there are a number of barriers to either spreading this program in its current form or using it as a model for an enlarged school-to-work transition effort.

This brief considers several critical policy issues in cooperative education as it is practiced at the high school level: program costs, the preparation of teachers and the training of employers to participate in the program, and the effect of the program on students' employment, school persistence, and social development.

The Nature of Cooperative Education

Cooperative education is a program which combines academic study with paid, monitored and credit-bearing work. It was established around the turn of the century as part of a movement to create experience-based education. In fact, the first coop program looked more like what we now would call apprenticeships. The four-year program, which led to beginning journeyman status, began with a year in which students studied only academic subjects; in the following three years, students alternated weeks between shop and school (Bailey & Merritt, 1993).

Today, cooperative education is concentrated in the vocational areas of marketing, trade and industry, and business. Although the program is national, specific arrangements are worked out locally between individual employers and school staff, subject to state laws and local customs. In contrast to German apprenticeships, to which they are often compared, high school cooperative education in this country generally only lasts a year or less (U.S. General Accounting Office, 1991). Although a few coop programs alternate days or weeks of school with work, or allow students to work in the morning, the most common arrangement is to schedule the morning at school and the afternoon in a paid job. Coop students usually take traditional academic and vocational classes with non-cooperative-education students, although particular courses may be recommended to the students by the school coop coordinator. In addition, good coop programs include a special related class, in which students are able to reflect on and integrate their job experiences.

While Federal funds have not been specifically designated for cooperative education, the program can be minimally supported by Federal vocational education funds. In fact, cooperative education declined significantly at the secondary level during the 1980s because of a loss of both Federal and state funds. While about 11 percent of all juniors and seniors were in cooperative education in 1981-82, by the end of the decade this percentage had decreased to about 8 percent (U.S. General Accounting Office, 1990).

The Cooperative Education Student

In contrast to cooperative education at the college level, which has become an intrinsic part of professional programs like engineering or architecture, the status of high school coop has suffered from its links to vocational education, which is often considered a dumping ground for low achieving, low income, minority students. Yet most cooperative education programs have admissions requirements, such as a 2.0 grade point average, good attendance, a positive attitude, and no disciplinary problems (U.S. General Accounting Office, 1991). Moreover, while a greater proportion of coop students are from low income homes and have lower test scores than all seniors, 41 percent are from the upper half of income groups and 30 percent are from the upper half of the test score distribution (U.S. General Accounting Office, 1991). In fact, according to High School and Beyond data, about 76 percent of all coop students are white, 12 percent black, and 10 percent Hispanic—about the same as in the general student population. Among all seniors in 1980, 23 percent of vocational education students were in coop, ten percent of general track students were in coop, and four percent of college preparatory students were in coop. Finally, most coop programs are in the inner cities or suburbs, with rural youth having the least access to these programs (U.S. General Accounting Office, 1991).

Program Costs

Cooperative education is not an inexpensive program. Typically, cooperative education teacher/coordinators are given only three courses, of which one is a special coop course related to students' work assignments. In return for three periods of released time, the teacher/coordinators are responsible for screening students for eligibility, as well as developing employment agreements and training plans, finding jobs, and monitoring the field experience (for the 15-20 students for whom they are ultimately responsible), through monthly or even bi-weekly visits (U.S. General Accounting Office, 1991). In periods of budget constraints, such as the last years have been for districts across the nation, high schools have found it increasingly difficult to absorb the costs of this released time. As a consequence, coop programs have diminished in size and effectiveness.

Budget cuts have also made it more difficult for teacher/coordinators to market their coop programs to prospective employers. Ironically, successful programs, in which students be-

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come permanent employees after completing their coop experience, involve the most work for coordinators, who must find new placements each year (U.S. General Accounting Office, 1991).

Finally, there are also professional costs associated with training, as the next two sections make clear.

Professional Preparation of the Coop Teacher/Coordinator

In the most effective and common high school cooperative education model, a teacher/coordinator handles all the work placements, and teaches a course related to the students' work assignment. The traditional preparation for becoming a teacher/coordinator has been through a special vocational education course offered in teacher training institutions. However, such courses are generally disappearing, largely because there have been so few openings for new coop teacher/coordinators. In fact, because few new teachers are being hired in any subject area, if cooperative education is to be expanded, or if apprenticeships or other school-to-work programs are to be a serious option, existing teachers must be trained for the coordinator role. This means creating in-service courses which incorporate the content of the preservice vocational education courses that were once delivered in teacher training institutions. These courses would give teacher/coordinators the skills to connect schools to the workplace, and would teach them how to develop objectives for curriculum, materials, student behavior, and institutional links, as well as their own effectiveness in all these areas (Armstrong, 1988).

Training Employers for Coop Programs

Many high school programs in the U.S. once had training programs for employers to teach them how to be trainers on the job. Unfortunately, the dwindling of coop, combined with the presumed reluctance of employers to participate even without training, has made employer training appear a utopian dream.

Nevertheless, for coop or any other workplace training program to succeed, it is important to have someone at the worksite responsible for workplace learning. This includes mentoring and coaching to pass on the culture of the workplace, as well as the transmitting of real knowledge and skills.

The Role of Employers

In the German system, employers have traditionally been eager to take apprentices, in large part because these young workers remained in the same firm for most of their work lives. By contrast, employment patterns in the United States are characterized by high mobility; thus, it has been assumed that few employers will spend time and money on training young workers who will not stay with the company, and will take their training somewhere else. At the same time, while unions in Germany are strong and play a central role in operating apprenticeships, in the United States the unions have been weaker, particularly in areas where coop programs have been most prominent, and they have not been part of the design of coop.

According to the U.S. Government Accounting Office (1991, p. 30), the major barrier to employer participation has simply been a "lack of awareness about programs." However, a close second has been the image of coop as a dumping ground for academically-poor high school students. In the 1970s, when employers were paid 100 percent wage subsidies to provide part-time jobs to disadvantaged students under the Youth Incentive Entitlement Pilot Project, only 18 percent of employers were willing to participate (Ball & Wolfhogan, 1981). During the 1980s, the Targeted Job Tax Credit (TJTC) perpetuated the stigma of coop as a program for low-income students, since this program only allowed tax credits for those students on welfare or with other serious disadvantages. In fact, because of the stigma, many employers actually underestimated the skills that TJTC participants could bring to the job (Bishop, 1986).

If either coop or youth apprenticeships are to succeed, they must throw off the image of offering employers less than the best. All adolescents today can be considered at risk of not becoming successful workers, but coop's screening process makes it a good choice for those employers who decide to participate in a school-based work-training program.

The Effects of Coop on Students

To understand the effects of cooperative education on students, it is useful to begin by comparing coop or other supervised work experiences to unsupervised jobs that adolescents might otherwise have.

Adolescent Work and Coop. Although over 90 percent of all high school students have worked by the time they graduate, most of this work is unskilled and repetitive, as well as segregated from adult workers. Indeed, one study found that less than 10 percent of adolescents' time in unsupervised work is spent reading, writing, calculating, exercising judgment or making decisions (Greenberger & Steinberg, 1986). Given these conditions, it is not surprising that unsupervised youth work experiences offer students few technical skills and are apparently unrelated to school learning. Moreover, working more than twenty hours a week is associated with reduced school completion—although it is not clear whether or not those students who work more are already alienated from school (Stern, Hopkins, Stone, McMillion, Cagampang, & Klein, 1992). Finally, while some youth in unsupervised work develop "worker virtues," especially in the area of social skills, they actually show a higher incidence of petty theft, tardiness, and so on than students who do not work (Hamilton, 1990).

If coop only provided students with money, it would be no better than these unsupervised youth employment experiences. However, one five-year longitudinal study comparing students in unsupervised jobs with students enrolled in school-supervised work (predominantly coop) programs found that students in supervised programs have higher-quality jobs with more contact with adults. These coop and other school-supervised work experiences provide students more supervision on

the job, more challenge, and more work that is meaningful (Stone, Stern, Hopkins, & Mcmillion, 1991). Both students and employers in these supervised jobs more frequently report that the students' work involves assuming responsibility, as well as reading, writing, problem-solving and other practices related to school learning (Stone, Stern, Hopkins, & McMillion, 1990). As Berryman, Flaxman and Inger conclude, although no coherent vision of the curriculum and pedagogy of the work place has emerged from cooperative education, "on average, the quality of cooperative education jobs is superior to the standard jobs that students not in cooperative education obtain" (1993, p. 80, 81).

Does this higher quality work experience influence the students' social development, school persistence and economic future?

Social Development. Cooperative education students usually express more satisfaction with school, and a more positive attitude toward work, but they do not necessarily have more occupational knowledge or "affective" competence (Stern, Hopkins, Stone, & McMillion, 1990). There is also no consistent evidence that cooperative education students show less delinquency or higher voting rates (Berryman, et al, 1993). Nevertheless, relative to students in regular classrooms, students in experiential education programs like coop make gains on moral reasoning, self-esteem, social and personal responsibility, attitudes towards adults and others, career exploration, and empathy/complexity of thought. Equally important, the single strongest factor explaining these changes is the weekly reflective learning session in their related class, during which students integrate their learning on the job with classroom learning (Armstrong, 1988).

School Persistence. It is commonly believed that relating education to work "enhances motivation to perform well and increases school retention and the likelihood of pursuing postsecondary education" (U.S. General Accounting Office, 1991, p. 4). It has been argued that vocational education in general lowers the dropout rate (Bishop, 1988) and that students in "high quality" coop programs are more likely than other vocational education students to stay in school and pursue additional education (U.S. Government Accounting Office, 1991). Indeed, because students in work-supervised jobs are more likely to connect what they learn at school with what is and will be needed at work, these jobs are "more likely to reinforce, or less likely to undermine the students' commitment to school" (Stern, Hopkins, Stone, McMillion, Cagampang, & Klein, 1992, p. 10). Not surprisingly, cooperative education students also tend more often to claim that their jobs have positively affected their decisions to stay in school, and to attend classes during their senior year (Herrnstadt, Horowitz, & Sum, 1979).

As for postsecondary education, only a quarter of all coop students are in two- and four-year colleges two years after high school, which is a lower rate than all seniors. However, three-quarters of coop students are working for pay, which is significantly more than those seniors who were not in a supervised work program. Obviously, information is needed on how these students fare five or ten years after graduation.

Economic Outcomes. While having a job may be beneficial to students' short-term earnings, jobs which interfere with schooling have a negative effect because educational attainment has a much more powerful and long-lasting influence on employment than actual work experience (Hamilton, 1990). Generally, the economic benefits of a job are insubstantial if the student does not enter a job in the area in which he or she was trained, and less than half of all high school vocational education graduates get training-related jobs (Bishop, 1988). Moreover, earnings and labor force participation rates are not consistently better for cooperative education graduates than for other vocational education students, even though cooperative education students tend more often than regular high school vocational education students to find jobs related to their training, have a better work orientation, and more marketable job skills (Herrnstadt, Horowitz, & Sum, 1979). In fact, one of the primary weaknesses of cooperative education has been the absence of any systematic way for students' work-experiences to be converted into credentials or actual job placements (Berryman, et al, 1993). Fortunately, this problem may be soon be solved, since the Perkins Act of 1990 requires states to develop standards and measures of performance for vocational education.

The Components of a Quality Coop Program

Accepting that the quality of a coop program can vary because of local financing arrangements and initiatives, we can ask what makes a good coop work experience. The insights of several studies suggest a number of features (Laycock, Herman, & Laetz, 1992; Lynch, Price, & Burrow, 1992; U.S. General Accounting Office, 1991):

1. Quality coop placements in which the student is allowed to perform work that both provides opportunities to develop new competencies and contributes to the productivity of the organization.

2. Teacher/coordinators with appropriate occupational experience related to the industry associated with their program, as well as professional preparation for operating a school-supervised work education program.

3. Close supervision at the worksite by a training supervisor, as well as a mechanism by which the supervisor can share his own professional expertise with the coop student.

4. At the onset, an accurate and realistic description of the job for the student as well as accurate expectations by the employer of the skills the student brings to it.

5. Strong links between job training and related instruction, which might include an individualized, written training plan that is correlated to the students' in-school curriculum.

6. Frequent and specific informal and formal evaluations of the students' progress by the teacher/coordinator, with feedback and follow-up to improve performance.

7. Involvement of parents or guardians.

8. Placement of graduates in full-time positions, or referrals for addi-

tional instruction, and follow-up of graduates after three and five years.

9. Strong administrative support for the program.

Conclusion

The recent drive to create apprenticeships and work-based education for high school students makes it imperative that the long and largely fruitful experience of cooperative education be taken seriously. This experience has shown that worthwhile coop programs have not been cheap, that there must be money for promotion and recruitment, as well as training of both teacher/coordinators and employers. Teachers need to know how to work with industry, and employers have to understand the benefits of hiring—and working with—these students. Although strong evidence supports the benefits of school-supervised work experiences, we know little about what learning goes on in the workplace and how to maximize it. Finally, some form of certification must recognize skill attainment in coop education or any new school-supervised work experience program for it to be part of a school-to-work transition strategy.

— Carol Ascher

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Works Consulted

Armstrong, B.A. (1988). Evaluating the cooperative education program. *Journal of Cooperative Education, 25*(3), 44-55.

Bailey, T., & Merritt, D. (1993, March). *School-to-work transition and youth apprenticeship in the United States*. New York: Manpower Demonstration Research Corporation.

Ball, J., & Wolfhogen, C. (1981). *Participation of private business as work sponsors in the youth entitlement demonstration*. New York: Manpower Demonstration Research Corporation.

Berryman, S.E., Flaxman, E., & Inger, M. (1993, February). *Building the middle*. Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Bishop, J. (1988). *Vocational education for at-risk youth: How can it be made more effective?* Working Paper 88-11. State University of New York, Ithaca, School of Industrial and Labor Relations. ED 297 150

Bishop, J. (1986, June). *The effects of TJTC on Employers*. Task 4 Final Report, Revised. Ohio State University, Columbus, National Center for Research on Vocational Education. ED 297 155

The William T. Grant Foundation Commission on Work, Family and Citizenship. (1988). *The forgotten half: Pathways to success for America's youth and young families*. Washington, DC: Author.

Greenberger, F., & Steinberg, L. (1986). *When teenagers work: The psychological and social costs of adolescent employment*. New York: Basic Books.

Hamilton, S. F. (1990). *Apprenticeship for adulthood: Preparing youth for the future*. New York: The Free Press.

Herrnstadt, I. L., Horowitz, M. A., & Sum, A. (1979). *The transition from school to work: The contribution of cooperative education programs at the secondary level*. Boston, MA: Northeastern University, Department of Economics.

Laycock, A. B., Hermon, M. V., & Laetz, V. (1992, Spring). Cooperative education: Key factors related to a quality experience. *Journal of Cooperative Education, 27*(3), 36-56.

Lynch, R. L., Price, W. T., & Burrow, J. (1992, Spring). School-to-work transition through school-supervised work programs: A state policy study. *Journal of Vocational and Technical Education, 8*(2), 29-48.

Stern, D., Hopkins, C., Stone, J. R., III, McMillion, M., Cagampang, H., & Klein, S. (1992, July). *Does school-supervised work experience improve the tradeoff between present earnings and likely future career success for high school students?* Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Stern, D., Hopkins, C., Stone, J. R., III, McMillion, M. (1990, December). Quality of Students' Work Experience and Orientation Toward Work. *Youth and Society, 22*(2), 263-282.

Stern, D., McMillion, M., Hopkins, C., & Stone, J. R., III. (1990, March). Work experience for students in high school and college. *Youth and Society, 21*, 355-89.

Stone, J.R., III., Hopkins, C., Stern, D., & McMillion. (1992). *Cooperative vocational education: Who enrolls?* Paper presented at the annual meeting of the American Education Research Association, San Francisco.

Stone, J. R., III., Hopkins, C., Stern, D., & McMillion. (1991). *Learning from school-based work experience programs*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Stone, J. R., III, Stern, D., Hopkins, C., & McMillion. (1990, Spring). Adolescents' perceptions of their work: school supervised and non-supervised. *Journal of Vocational Education Research, 15*(2), 31-53.

Stone, J. R., III, Schaff, L., Hopkins, C., Stern, D., & McMillion, M. (1992). *What adolescents learn from working*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Stone, J. R.; III, Stern, D., Hopkins, C., & McMillion, M. (1991, April). *Learning from school-based work experience programs*. Paper presented at the American Education Research Association, Chicago.

Stone, J. R., III, Stern, D., Hopkins, C., & McMillion, M. (1990, March 24). *Adolescence and Work: Employers' and Adolescent Employees' Perceptions*. Paper presented at the 1990 Biennial Meeting of the Society for Research on Adolescence, Atlanta, GA.

U.S. General Accounting Office. (1991). *Transition from school to work: Linking education and worksite training*. Washington, DC: Government Printing Office.

U.S. General Accounting Office. (1990). *Training strategies*. Washington, DC: Government Printing Office.

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